

Exhibit A

Marked Up Version of Amended Claims-U.S. Patent Application Ser. No. 09/728,446

1 (Cancelled). An isolated polynucleotide comprising a contiguous stretch of at least about 60 nucleotides first disclosed in at least one of SEQ ID NOS: 1-1,461.

2 (Cancelled). An isolated polynucleotide according to Claim 3, wherein said polynucleotide sequence comprises at least one of SEQ ID NOS: 1-1,461.

3 (Cancelled). An *in vitro* process for producing an isolated polynucleotide incorporating a sequence capable of hybridizing to a sequence first disclosed in one of SEQ ID NOS: 1-1,461, comprising the steps of:

- a) obtaining a polynucleotide template encoding a sequence capable of hybridizing to an GTS of SEQ ID NOS: 1-1,461;
- b) contacting said template with a polynucleotide probe comprising at least about 25 contiguous bases first disclosed in SEQ ID NOS: 1-1,461;
- c) processing the combined probe and template to allow the specific detection of the combined probe and template; and
- d) isolating a clone encoding said template.

4 (Cancelled). The process of Claim 5 wherein said template is mammalian cDNA.

5 (Cancelled). The process of Claim 5 wherein said template is mammalian genomic DNA.

6 (Cancelled). A process according to Claim 6 wherein said template is of human origin.

7 (Cancelled). A process for identifying novel polynucleotide sequences comprising the steps of:

- a) retrieving a computer readable representation of a polynucleotide sequence first disclosed in at least one of SEQ ID NOS: 1-1,461, or an amino acid sequence encoded thereby, from a computer addressable form of electronic data storage medium;
- b) retrieving a computer readable representation of a test polynucleotide or polypeptide sequence from a computer addressable form of electronic data storage medium; and
- c) comparing the sequence of said test polynucleotide or polypeptide sequence to a sequence first disclosed in at least one of SEQ ID NOS: 1-1,461, or an amino acid sequence encoded thereby.

8 (Amended). An isolated murine embryonic stem cell line comprising an engineered mutation [retroviral gene trap vector in at least one] in a gene identifiable as encoding the [comprising a] polynucleotide sequence [first disclosed in one] of SEQ ID NO[S]: 819 [1-1,461].

9 (new). An embryonic stem cell line according to Claim 8, wherein said engineered mutation is by a retroviral gene trap vector.

Exhibit B

Clean Version of The Pending Claims-U.S. Patent Application Ser. No. 09/728,446

Claim 8 (amended). An isolated murine embryonic stem cell line comprising an engineered mutation in a gene identifiable as encoding the polynucleotide sequence of SEQ ID NO:819.

Claim 9 (new). An embryonic stem cell line according to Claim 8, wherein said engineered mutation is by a retroviral gene trap vector.